



Light Armored Vehicle - Command and Control Upgrade



Test Integration Working Group
06 Jul 05



Agenda

- | | | |
|-------------|--------------------------------|--------------------|
| ✦ 0900-0905 | Introductions | |
| ✦ 0905-0915 | Opening Remarks | Bill Ross |
| ✦ 0915-0945 | Program Overview | Bill Ross |
| ✦ 0945-1015 | Test Overview | Mike Canavan |
| ✦ 1015-1030 | Break | |
| ✦ 1030-1100 | MCTSSA Capabilities | Ray Clermont |
| ✦ 1100-1130 | EPG Capabilities | Miguel Cimadevilla |
| ✦ | Individual Contractor Sessions | |
| ✦ 1130-1230 | Contractor 'A' Session | |
| ✦ 1230-1330 | Lunch | |
| ✦ 1330-1430 | Contractor 'B' Session | |
| ✦ 1430-1500 | MCOTEA Involvement | Dave Thomas |
| ✦ 1500-1545 | Round Table Discussion | All |
| ✦ 1545-1600 | Break | |
| ✦ 1600-???? | Action Items and Wrap-up | |



LAV Program Manager's Office

- ✦ Col John Bryant, USMC is PM
- ✦ Dr Bob Lusardi is DPM
- ✦ PMO consists of 11 Marines and 67 civilians
 - Located at TACOM in Warren, MI
 - Have personnel at both Albany and Barstow
- ✦ Col Bryant has dual reporting chain
 - CG, TACOM
 - CG, MARCORSYSCOM
- ✦ LAV-C2 Upgrade team reports to Joe Wagner, Chief, International Programs and LAV Upgrades Division



LAV-C2 Upgrade Team

✦ Core members

- LtCol John Manza – Operations
- Derald Schnepf – Systems engineering
- Brad Paul – Engineering
- John Polanco – Logistics, comm equipment, security
- Capt Ernie Govea – Finance
- Doug Cleveland – Contracting
- George Theodorou – Ops research, cost estimates
- Terri Evans - Budgeting
- Bill Ross – Cat herder

✦ Matrix Support

- Dr. Paul Richardson – Networks
- Mike Canavan – Testing
- Mike Smith – Systems
- Pete Mager/Jack Smithmyer – Cosite, EMI



Program Background

- ✦ LAV-C2 first fielded in 1986 as a voice-only communications platform with 4 VHF, 1 HF and 1 UHF radios
 - MDACT and EPLRS added later
- ✦ Current LAV-C2 deficiencies:
 - Poor ability to send and receive digital battlefield information
 - Limited to single MDACT/C2PC via EPLRS
 - No AFATDS
 - No SATCOM
 - No HF Automatic Link Establishment (ALE)
 - Intercommunications system is obsolete

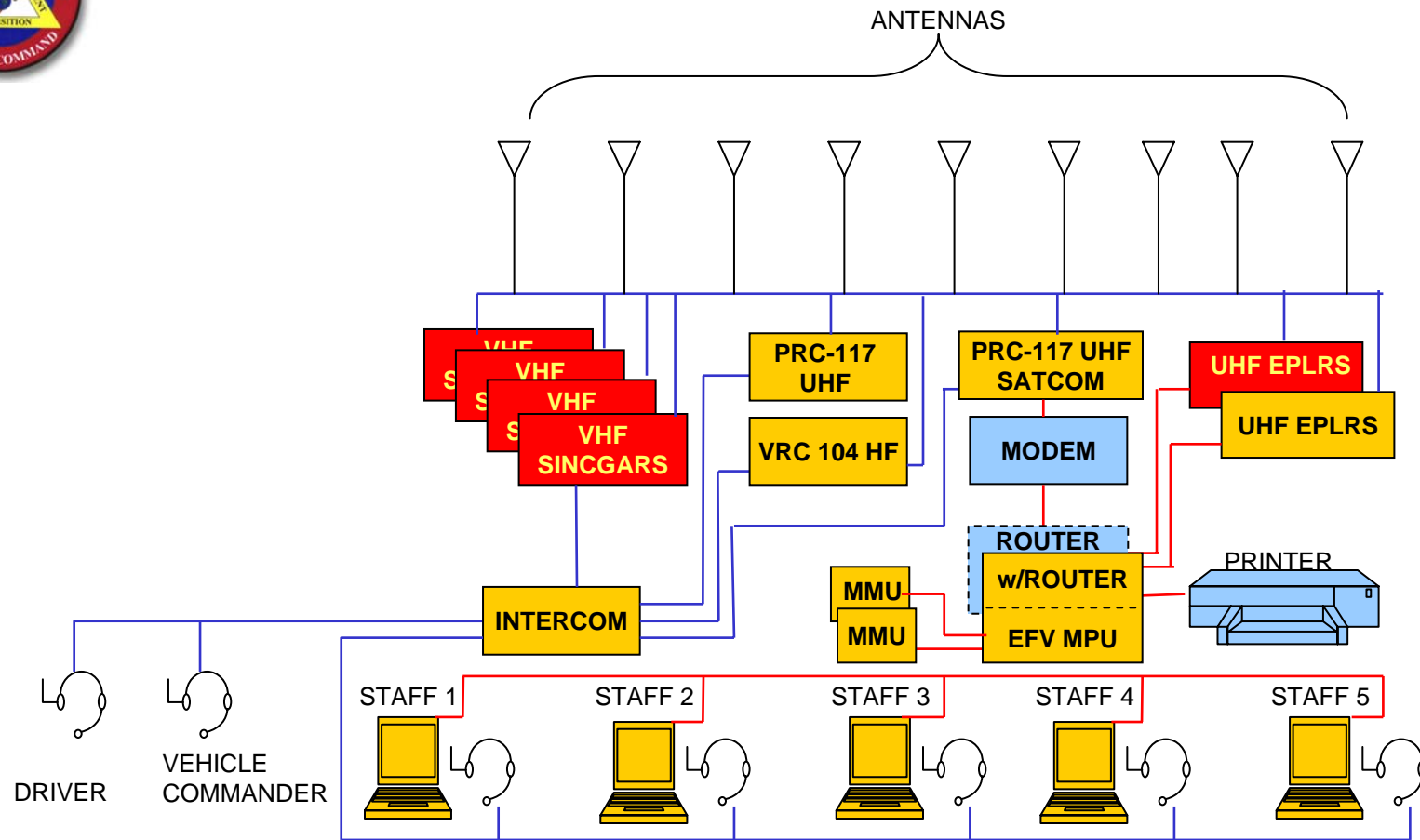


Selected Architecture

- ✦ One Server (EFV Multi-Processor Unit)
 - AFATDS and C2PC Gateway software host
 - Open architecture to allow additional programs/functions
- ✦ Five Laptops (Four Miltope and one Tadpole)
 - “Client” workstation from server
 - “Stand alone” workstation, if server fails
- ✦ One Intercom to support a minimum of 16 nodes
 - Seven crew and nine radio nodes
- ✦ Radios
 - Keeping 4 VHF SINCGARS
 - Updating 1 HF to PRC-104
 - Updating 1 UHF to PRC-117
 - Adding 1 SATCOM (PRC-117)
 - Adding 1 EPLRS (now will have 2)



LAV-C2 Architecture



- GOVT DIRECTED/PROCURED NDI
- EXISTING HARDWARE
- CONTRACTOR SELECTED NDI
- VOICE
- DATA



Acquisition Strategy

- ✦ Strategy approved by MDA on 15 Feb 05
- ✦ Three phase program using NDI components
- ✦ Phase 1: Two competing contractors will integrate and demonstrate system performance on one vehicle each
- ✦ Phase 2: Down-select to a single source to complete development
 - DT/OT
 - Logistics product development
- ✦ Phase 3: Production of 50 vehicles
 - IOC is scheduled for FY09
 - FOC is scheduled for FY10



Program Structure Chart

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	
Phases	<div> <div>SDD</div> <div>DFT</div> <div>Production & Deployment</div> </div>						
Decision Reviews	△ MS B		△ MS C		△ IOC	△ FOC	
Contract Awards	△ SDD (CPFF) 2 ea	△ SDD Opt (CPFF)	△ Prod Opt (FFP) 10 Vehs	△ Prod Opt (FFP) 17 Vehs	△ Prod Opt (FFP) 19 Vehs		
# of Contractors	<div> <div></div> <div></div> </div>						
Technical Reviews	△ PDR 2 ea	△ CDR 2 ea	△ FCA	△ PCA			
Testing		□ Demo	□ DT	□ OT	□ PVT		
Deliveries		△ 1 Proto (2 Krs)	△ 1 EDM	△ 2 Prod Rep	△ 10 FRP	△ 17 FRP	△ 19 FRP
							TOTAL
RDT&E	12.484	11.061	2.760				26.305
PMC			18.147	30.487	30.75	0.754	80.138
O&MMC	0.025		0.160	0.175			0.360
TOTAL	12.509	11.061	21.067	30.662	30.75	0.754	106.803

Program Manager-Light Armored Vehicles